#148

Application For Research Grant

(Compare #63 initiated 4/15/55. Completed.)

Date: February 5, 1957

- David L. Simon, M.D., Arnold Iglauer, M.D. and John R. Braunstein, M.D.
- 2. Title: Instructor in Medicine and Fellow in Cardiovascular Research, Department of Internal Medicine, College of Medicine, University of Cincinnati
- 3. Institution Cincinnati General Hospital, Cardiac Laboratory, B-4
 & Address: Cincinnati 29, Ohio
- 4. Project or Subject: The Effects of Pipe Smoking and Cigar Smoking on the Cardiovascular System of Man.

This is a continuation of our interest in the field of tobacco and the cardiovascular system. The first paper was entitled "The Immediate Effect of Cigarettes on the Circulation of Healthy and Habitual Male Smokers" which appeared in the American Hrt. J. 48:185, 1954.

Our most recent work was done under grant #3619 of the Tobacco Industry Research Committee and will be published soon in the Journal of the American Medical Association.* A complete report of this work has been submitted to Robert C. Hockett, Associate Scientific Director.

*Will appear in Feb. 2, 1957 issue of J.A.M.A.

5. Detailed Plan of Procedure:

Male subjects of various ages both normal and with heart disease will be studied on 3 consecutive days in the following manner: they will be placed in the post-absorption state in a constant temperature room at the Kettering Laboratory, University of Cincinnati and after a period of equilibrium in a room of controlled humidity, dew point and temperature will be given either placebo consisting of a pipeful of special tobacco with most of its nicotine removed or their regular pipe tobacco and after an average pipe smoking period the following observations will be made: observations will be made automatically at short intervals of skin termperature, of toes and fingers and forehead. Blood pressures and pulse rates will also be recorded at short intervals. When maximum changes have occurred and the record becomes normal or near normal the patient will be asked to return the next day for the same procedure except with the opposite form of tobacco (that is, if he smokes regular tobacco in his pipe the first day he will be given low nicotine tobacco the 2nd day and vice versa). In addition, the same observations will be made on male subjects with cigars and on 1 day the cigar will be smoked through a silica-gel filter, and on the other day the subject's brand cigar will be smoked without a filter.

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5. Detailed Plan of Procedure (continued)

The third day each subject will be taken to the ballistocardiographic laboratory located in the Cincinnati General Hospital and part of the Cardiac Laboratory of the Department of Internal Medicine, University of Cincinnati. The ballistocardiograms will be recorded at short intervals; a resting period, a smoking period, and a post-smoking period. During a short time the patient will smoke either his regular pipe tobacco in his pipe or will smoke his regular cigar.

When enough patients have been studied to make statistical analysis valid the data, as in our other paper, will be submitted to statistical analysis.

The proposed study in essence will be carried out essentially as our former studies were above except that we will be studying pipe smoking and cigar smoking.

Salaries Expendable Supplies Permanent Equipment Overhead (5%) Other

2,500.00 300.00 140.00

Total

2,940.00

7. Anticipated Duration of Work:

6 months to a year

8. Facilities and Staff Available: The facilities of the Cardiac Laboratory, Department of Internal Medicine, University of Cincinnati, and the facilities of the Kettering Laboratory of Applied Physiology, University of Cincinnati. The immediate staff would consist of myself, Dr. Arnold Iglauer, Mrs. Beatrice Doherty of the Kettering Laboratory, Dr. Raymond Suskind of the Kettering Laboratory, Dr. John Braumstein of the Cardiac Laboratory, Mr. Robert Schwemberger, technician of the Ballistocardiographic Laboratory, and Miss Norma Grimm and Mrs. Betty Boyd, secretaries of the Cardiac Laboratory.

9. Additional Requirements:

None

10. Additional Information (Including relation of work to other projects and other sources of supply):

This is a continuation of our studies and our interest in tobacco. are helped by grants from the National Heart Institute of the United States Public Health Service, and donations from local industries and local individuals.

e <u>David L. Simon</u> Director of Project

Robert